

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A method for automatically detecting scene changes within a digital video sequence including a succession of frames, comprising:

computing metrics for each of a plurality of frames from a digital video sequence, the metric of a frame being a measure of distance between the frame and a given frame;

identifying one candidate frame for which the metric of the candidate frame differs from the metric of the predecessor frame to the candidate frame, by at least a first threshold;

determining whether the metrics of successive ones of each of a first plurality of frames, successively following the candidate frame, differ from one another by less than a second threshold; and

further determining whether the metrics of each frame of a second plurality of frames, successively preceding the candidate frame, are larger than a third threshold.

Claim 2 (original): The method of claim 1 wherein the measure of distance is based on color histograms of frames.

Claim 3 (original): The method of claim 2 wherein the measure of difference is a sum of absolute values of differences of histogram frequencies.

Claim 4 (original): The method of claim 2 wherein the measure of difference is a sum of squares of differences of histogram frequencies.

Claim 5 (original): The method of claim 1 further comprising marking the candidate frame as a scene change frame, when said determining determines that the metrics of successive ones of each of the first plurality of frames differ from one another by less than the second threshold, and when said further determining determines that the metrics of each frame of the second plurality of frames are larger than the third threshold.

Claim 6 (previously presented): The method of claim 5 wherein said marking does not mark the candidate frame as a scene change frame if a frame preceding the candidate frame is substantially similar to a current frame.

Claim 7 (currently amended): A system for automatically detecting scene changes within a digital video sequence including a succession of frames, comprising:

a processor computing metrics for each of a plurality of frames from a digital video sequence, the metric of a frame being a measure of distance between the frame and a given frame;

a frame identifier identifying and marking one [[a]] candidate frame for which the metric of the candidate frame differs from the metric of the predecessor frame to the candidate frame, by at least a first threshold; and

a comparator determining whether the metrics of successive ones of each of a first plurality of frames, successively following the candidate frame, differ from one another by less than a second threshold, and determining whether the metrics of each frame of a second plurality of frames, successively preceding the candidate frame, are larger than a third threshold.

Claim 8 (original): The system of claim 7 wherein the measure of distance is based on color histograms of frames.

Claim 9 (original): The system of claim 8 wherein the measure of distance is a sum of absolute values of differences of histogram frequencies.

Claim 10 (original): The system of claim 8 wherein the measure of distance is a sum of squares of differences of histogram frequencies.

Claim 11 (previously presented): The system of claim 7 further comprising a scene change marker marking the candidate frame as a scene change frame, when said comparator determines that the metrics of successive ones of each of the first plurality of frames differ from one another by less than the second threshold, and that the metrics of each frame of the second plurality of frames are larger than the third threshold.

Claim 12 (previously presented): The system of claim 11 wherein said scene change marker does not mark the candidate frame as a scene change frame if a frame preceding the candidate frame is substantially similar to a current frame.

Claims 13-36 (canceled)

Claim 37 (new): The method of claim 1, further comprising:
repeating each of the method operations for a next candidate frame.